

## Mine Safety and Health Admin., Labor

## § 71.702

1330 Kemper Meadow Drive, Attn: Customer Service, Cincinnati, OH 45240; <http://www.acgih.org>.

(b) All persons, including employees, shall be withdrawn from any area in which there is a concentration of an airborne contaminant given a "C" designation by the Conference which exceeds the threshold limit value (ceiling "C" limit) listed for that contaminant.

[37 FR 6368, Mar. 28, 1972, as amended at 39 FR 17101, May 13, 1974; 43 FR 12319, Mar. 24, 1978. Redesignated at 45 FR 80756, Dec. 5, 1980, as amended at 67 FR 38385, June 4, 2002; 71 FR 16668, Apr. 3, 2006]

### § 71.701 Sampling; general requirements.

(a) Air samples will be taken by the Secretary and will be analyzed to determine the concentrations of noxious or poisonous gases, dusts, fumes, mists, and vapors in surface installations and at surface work sites.

(b) Upon written notification by the Secretary to the operator of an underground coal mine or of a surface coal mine, the operator shall conduct any additional air sampling tests and analyses as the Secretary may from time to time require in order to ensure compliance with the standards set forth in § 71.700 in each surface installation and at each surface work site.

(c) Where concentrations of airborne contaminants in excess of the applicable threshold limit values, permissible exposure limits, or permissible excursions are known by the operator to exist in a surface installation or at a surface work site, the operator shall immediately provide necessary control measures to assure compliance with § 71.700 or § 71.702, as applicable.

(d) Where the operator has reasonable grounds to believe that concentrations of airborne contaminants in excess of the applicable threshold limit values, permissible exposure limits, or permissible excursions exist, or are likely to exist, the operator shall promptly conduct appropriate air sampling tests to determine the concentration of any airborne contaminant which may be present and immediately provide the necessary control measures

to assure compliance with § 71.700 or § 71.702, as applicable.

[37 FR 6368, Mar. 28, 1972. Redesignated at 45 FR 80756, Dec. 5, 1980; 73 FR 11304, Feb. 29, 2008]

### § 71.702 Asbestos standard.

(a) *Definitions.* Asbestos is a generic term for a number of asbestiform hydrated silicates that, when crushed or processed, separate into flexible fibers made up of fibrils.

*Asbestos* means chrysotile, cummingtonite-grunerite asbestos (amosite), crocidolite, anthophyllite asbestos, tremolite asbestos, and actinolite asbestos.

*Asbestos fiber* means a fiber of asbestos that meets the criteria of a fiber.

*Fiber* means a particle longer than 5 micrometers (µm) with a length-to-diameter ratio of at least 3-to-1.

(b) *Permissible Exposure Limits (PELs)*—(1) *Full-shift limit.* A miner's personal exposure to asbestos shall not exceed an 8-hour time-weighted average full-shift airborne concentration of 0.1 fiber per cubic centimeter of air (f/cc).

(2) *Excursion limit.* No miner shall be exposed at any time to airborne concentrations of asbestos in excess of 1 fiber per cubic centimeter of air (f/cc) as averaged over a sampling period of 30 minutes.

(c) *Measurement of airborne asbestos fiber concentration.* Potential asbestos fiber concentration shall be determined by phase contrast microscopy (PCM) using the OSHA Reference Method in OSHA's asbestos standard found in 29 CFR 1910.1001, Appendix A, or a method at least equivalent to that method in identifying a potential asbestos exposure exceeding the 0.1 f/cc full-shift limit or the 1 f/cc excursion limit. When PCM results indicate a potential exposure exceeding the 0.1 f/cc full-shift limit or the 1 f/cc excursion limit, samples shall be further analyzed using transmission electron microscopy according to NIOSH Method 7402 or a method at least equivalent to that method.

[73 FR 11304, Feb. 29, 2008, as amended at 73 FR 66172, Nov. 7, 2008]

## PART 72—HEALTH STANDARDS FOR COAL MINES

### Subpart A—General

Sec.

72.1 Scope.

### Subparts B–C [Reserved]

### Subpart D—Diesel Particulate Matter—Underground Areas of Underground Coal Mines

- 72.500 Emission limits for permissible diesel-powered equipment.
- 72.501 Emission limits for nonpermissible heavy-duty diesel-powered equipment, generators and compressors.
- 72.502 Requirements for nonpermissible light-duty diesel-powered equipment other than generators and compressors.
- 72.503 Determination of emissions; filter maintenance; definition of “introduced”.
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- 72.610 Abrasive blasting.
- 72.620 Drill dust control at surface mines and surface areas of underground mines.
- 72.630 Drill dust control at underground areas of underground mines.
- 72.710 Selection, fit, use, and maintenance of approved respirators.

AUTHORITY: 30 U.S.C. 811, 813(h), 957, 961.

SOURCE: 59 FR 8327, Feb. 18, 1994, unless otherwise noted.

### Subpart A—General

#### § 72.1 Scope.

The health standards in this part apply to all coal mines.

### Subparts B–C [Reserved]

### Subpart D—Diesel Particulate Matter—Underground Areas of Underground Coal Mines

SOURCE: 66 FR 5704, Jan. 19, 2001, unless otherwise noted.

#### § 72.500 Emission limits for permissible diesel-powered equipment.

(a) Each piece of permissible diesel-powered equipment introduced into an underground area of an underground coal mine after May 21, 2001 must emit

no more than 2.5 grams per hour of diesel particulate matter.

(b) As of July 19, 2002, each piece of permissible diesel-powered equipment operated in an underground area of an underground coal mine must emit no more than 2.5 grams per hour of diesel particulate matter.

[66 FR 5704, Jan. 19, 2001, as amended at 66 FR 15033, Mar. 15, 2001; 66 FR 27866, May 21, 2001]

#### § 72.501 Emission limits for nonpermissible heavy-duty diesel-powered equipment, generators and compressors.

(a) Each piece of nonpermissible heavy-duty diesel-powered equipment (as defined by § 75.1908(a) of this part), generator or compressor introduced into an underground area of an underground coal mine after May 21, 2001 must emit no more than 5.0 grams per hour of diesel particulate matter.

(b) As of July 21, 2003, each piece of nonpermissible heavy-duty diesel-powered equipment (as defined by § 75.1908(a) of this part), generator or compressor operated in an underground area of an underground coal mine must emit no more than 5.0 grams per hour of diesel particulate matter.

(c) As of January 19, 2005, each piece of nonpermissible heavy-duty diesel-powered equipment (as defined by § 75.1908(a) of this part), generator or compressor operated in an underground area of an underground coal mine must emit no more than 2.5 grams per hour of diesel particulate matter.

(d) Notwithstanding the other provisions of this section, a generator or compressor that discharges its exhaust directly into intake air that is coursed directly to a return air course, or discharges its exhaust directly into a return air course, is not subject to the applicable requirements of this section.

[66 FR 5704, Jan. 19, 2001, as amended at 66 FR 15033, Mar. 15, 2001; 66 FR 27866, May 21, 2001]

#### § 72.502 Requirements for nonpermissible light-duty diesel-powered equipment other than generators and compressors.

(a) Each piece of nonpermissible light-duty diesel-powered equipment